ABSTRACT OF THE DISCLOSURE

The present invention eliminates the need for an anti-aliasing filter in a receiver that employs an analog-to-digital converter. By maintaining a predetermined relationship between a local oscillator frequency and the sampling frequency of the analog-to-digital converter, aliasing that would normally occur in the desired pass band is avoided. More specifically, the frequency of the periodic signal provided to the mixer is an integer multiple of half the sampling rate of the analog-to-digital converter. In a preferred, non-limiting example embodiment, the sampling rate of the analog-to-digital converter F_{ADC} and the frequency of the local oscillator F_{LO} are related by the following: $F_{LO} = n * F_{ADC} / 2$, where n is any positive integer.